

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John Breen on 7/20/2009.

The application has been amended as follows:

Amend the specification, beginning at page 5, line 31, and ending at page 7, line 28, as follows:

The present invention relates to a method for inducing proliferation of a neural stem cell, including contacting the neural stem cell with at least one of a dendritic cell, a blood cell, the culture supernatant of the cell, or granulocyte-macrophage colony stimulating factor (GM-CSF) (~~claim 1~~); the above method for inducing proliferation of a neural stem cell ~~of claim 1~~, including contacting the neural stem cell with at least one of a dendritic cell, a blood cell, and granulocyte-macrophage colony stimulating factor (GM-CSF) in a culture medium (~~claim 2~~); the above method for inducing proliferation of a neural stem cell ~~of claim 2~~, including isolating a mammalian nervous tissue containing the neural stem cell, selectively culturing the neural stem cell in a culture medium containing a growth factor, and then co-culturing the neural stem cell with a dendritic cell and/or a blood cell (~~claim 3~~); the above method for inducing proliferation of

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a neural stem cell ~~of claim 2~~, including isolating a mammalian nervous tissue containing the neural stem cell, selectively culturing the neural stem cell in a culture medium containing a growth factor, and then culturing the neural stem cell in the culture supernatant of a dendritic cell and/or a blood cell ~~(claim 4)~~; any of the above methods for inducing proliferation of a neural stem cell ~~of any one of claims 2 to 4~~, in which the culture medium containing the growth factor is a culture medium containing at least EGF and/or FGF ~~(claim 5)~~; any of the above methods for inducing proliferation of a neural stem cell ~~of any one of claims 1 to 5~~, in which the dendritic cell are an immature dendritic cell subset having the CD11c surface marker on the cell surface or a mature dendritic cell subset derived from the immature dendritic cell subset ~~(claim 6)~~; and any of the above methods for inducing proliferation of a neural stem cell ~~of any one of claims 1 to 6~~, in which the blood cell is a spleen cell, a T cell, a monocyte, a neutrophil, an eosinophil, or a basophil ~~(claim 7)~~.

The present invention also relates to a set for inducing proliferation of a neural stem cell, including at least one of a dendritic cell, a blood cell or the culture supernatant of the cell, or the granulocyte-macrophage colony stimulating factor (GM-CSF) ~~(claim 8)~~; the above set for inducing proliferation of a neural stem cell ~~of claim 8~~, further including a culture medium containing a growth factor ~~(claim 9)~~; and the above set for inducing proliferation of a neural stem cell ~~of claim 9~~, in which the culture medium containing the growth factor is a culture medium containing at least EGF and/or FGF ~~(claim 10)~~; any of the above sets for inducing proliferation of a neural stem cell ~~of any one of claims 8 to 10~~, in which the dendritic cell is an immature dendritic cell subset having the CD11c surface marker on the cell surface or a mature dendritic cell subset derived from the immature dendritic cell subset ~~(claim 11)~~, any of the above sets for

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inducing proliferation of a neural stem cell ~~of any one of claims 8 to 11~~, in which the blood cell is a spleen cell, a T cell, a monocyte, a neutrophil, an eosinophil, or a basophil ~~(claim 12)~~.

The present invention also relates to a therapeutic agent for a nerve injury or nerve function insufficiency, containing as an active ingredient the neural stem cell obtained by any of the above methods for inducing proliferation ~~of any one of claims 1 to 7 (claim 13)~~; a therapeutic agent for a nerve injury or nerve function insufficiency, containing as an active ingredient ~~a~~ any of the above sets for inducing proliferation ~~of any one of claims 8 to 12 (claim 14)~~; a therapeutic agent for cerebral infarction, including containing granulocyte-macrophage colony-stimulating factor (GM-CSF) as an active ingredient ~~(claim 15)~~; a therapeutic method for a nerve injury or nerve function insufficiency, including administering the neural stem cell obtained by any of the above methods for inducing proliferation ~~of any one of claims 1 to 7 (claim 16)~~; a therapeutic method for a nerve injury or nerve function insufficiency, including administering any of the above sets for inducing proliferation ~~of any one of claims 8 to 12 (claim 17)~~; and a therapeutic method for cerebral infarction, including administering granulocyte-macrophage and colony-stimulating factor (GM-CSF) ~~(claim 18)~~.

2. The following is an examiner's statement of reasons for allowance: The above amendments to the specification are intended to remove references to original claims which were not allowed. The amendments do not introduce new matter and they do not alter the scope of the allowed claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel C. Gamett, PhD., whose telephone number is (571)272-1853. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manjunath N. Rao can be reached on 571 272 0939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel C Gamett/  
Examiner, Art Unit 1647